## Tri-CityHerald.com

Next Story >

No furloughs for vit plant workers during July

## Studies mult impact of closing nuclear power plant near Richland

Published: April 24, 2013

By Annette Cary — Herald Staff writer

Washington and Oregon chapters of Physicians for Social Responsibility have commissioned an economic study of the possibility of shutting down the nuclear power plant near Richland.

The low cost of power in the Mid-Columbia could mean that power produced by the plant could be replaced economically if Energy Northwest's Columbia Generating Station retired early, according to the group. The plant's license was approved last year to operate through 2043.

However, Bonneville Power Administration and Energy Northwest said a study they have done shows a temporary or permanent shutdown of the plant shows that would increase the cost of power for the region.

Costs for consumers would increase at least \$2.5 billion during the next 20 years if the plant is shut down and replacement power produced by natural gas is purchased, said Brent Ridge, Energy Northwest chief financial and risk officer.

But Physicians for Social Responsibility says the power produced by the plant costs more than the market price of regional electricity.

The price of power in the Mid-Columbia was \$18.85 per megawatt hour last year, but Energy Northwest's nuclear power cost was about \$47.30 per megawatt hour, said Robert McCullough, of McCullough Research. His Portland-based firm has been hired to conduct the study for Physicians for Social Responsibility.

Increasing renewable energy production and relatively cheap natural gas prices are putting pressure on some relatively expensive base-load power production systems, he said.

Low projected wholesale power prices already are one of the reasons cited for the planned shutdown of the Kewaunee Power Station nuclear power plant in Wisconsin.

McCullough, an economist who serves on the committee that oversees Reed College's small nuclear research reactor in Portland, thought it seemed reasonable when approached by environmentalists to see if shutting down the Energy Northwest reactor early could produce significant savings, he said.

The question is whether it might be cheaper to buy power on the open market, he said. Now power is available through 2017 at \$44.30 per megawatt hour during peak hours and \$32.50 during off-peak hours, he said.

A study of the financial value of the nuclear plant seemed particularly timely as the Columbia Generating Station faces significant costs, according to Physicians for Social Responsibility.

New rules following the Fukushima, Japan, nuclear disaster may require installing vents that could withstand pressure and temperature of the steam generated early in an accident with core damage. The vents could cost \$25 million to \$30 million.

In addition, the plant may need to replace its main turbine in the next decade at a cost of \$120 million, said

Charles Johnson, director of the Physicians for Social Responsibility Joint Task Force on Nuclear Power.

The task force sent out letters to the Energy Northwest member utilities and other regional groups and public officials describing the study and inviting them to meet to discuss concerns about the possible closure of the plant. The plant employs about 1,100 workers.

BPA and Energy Northwest began their own study after questions were raised at public hearings about the long-term viability of the Columbia Generating Station because of low natural gas prices, Ridge said at an Energy Northwest Board meeting in Pasco.

The study looked at three scenarios. It predicted that the estimated cost of nuclear power production would be \$45.80 per megawatt hour through 2043.

If the plant were shut down for five years and the power replaced during that time, the cost of power through 2043 would be \$52.30 per hour.

Not only would replacement power have to be paid, but fixed costs of the plant would need to be covered, Ridge said.

Under that option, costs to consumers would increase about \$1 billion, according to the study.

If the plant were shutdown permanently and power from natural gas bought to replace its output, the cost would be \$59.73 per megawatt hour over 30 years, the study found. That would include costs such as the beginning of decommissioning of the plant, Ridge said.

Costs to consumers would increase about \$2.5 billion, according to the study.

Continued operation of the plant is the most cost-effective option for the consumer, Ridge said, but it also has other benefits. Energy Northwest last year struck an unusual deal to use depleted uranium stored by DOE which will fix its uranium fuel price through 2028.

"It's a strong hedge against fossil fuel volatility," Ridge said. Numbers used to reflect the predicted trajectory of natural gas prices over decades were conservative, particularly considering growing global demand for energy, he said.

The Columbia Generating Station produces more than 1,000 megawatts of power, or about 10 percent of BPA's energy, which is enough to power a city the size of Seattle, said Doug Johnson, BPA spokesman.

"You have to consider the domino effect if you take 1,100 megawatts out of the mix," he said.

The nuclear power plant provides consistency, producing power 24 hours a day, seven days a week and complements the more seasonal hydropower production that accounts for 80 percent of BPA power, he said.

-- Annette Cary: 582-1533; acary@tricityherald.com; Twitter: @HanfordNews

Back to Top < Previous Story



Congresswoman Jaime Herrera Beutler tours Hanford



Email Newsletters >

No furloughs for vit plantage ricevslettering bariptions
Tablets >

Apps and services for tablet devices
Mobile >

Apps and services for your mobile phone
Social Media >

Get updates via Facebook and Twitter
e-Edition >

Your daily paper delivered to your computer

Your daily paper delivered to your computer
Home Delivery >
Manage your home delivery account
Digital Subscriptions >
Manage your online subscriptions

© 2013 www.tri-city herald.com and wire service sources. All Rights Reserved. http://www.tri-city herald.com